V. REMARKS

Claims 1-11 are rejected under 35 U.S.C. 103(a) as unpatentable over Taguchi (U.S. Patent No. 6,112,998). The rejection is respectfully traversed.

Taguchi discloses a thermostatic expansion valve that is included in a refrigeration cycle for expansion of a refrigerant which is contained in the refrigeration cycle. The thermostatic expansion valve includes a refrigerant passage for guiding the refrigerant, a valve mechanism placed in the refrigerant passage for adjusting a flow of the refrigerant in the refrigerant passage and operation controller for controlling an operation of the valve mechanism in response to temperature of the refrigerant. The refrigerant passage has specific pressure when the refrigeration cycle is operated. Further, the thermostatic expansion valve also includes a particular chamber substantially separated from the refrigerant passage, an additional passage connected between the particular chamber and the refrigerant passage for introducing the specific pressure into the particular chamber to make the particular chamber have particular pressure relating to the specific pressure. Also, it includes a pressure transmission member coupled to the particular chamber and the valve mechanism for transmitting the particular pressure to the valve mechanism to reduce influence of the specific pressure to the operation of the valve mechanism.

Claim 1, as amended, is directed to an expansion valve that includes a flange portion, a tube member formed separately from the flange portion and at least one seal member. Claim 1 recites that tube member has fixed to its interior a guide member, an orifice member and a plate member. Claim 1 further recites that the tube member includes a shaft member passing through the guide member and the orifice member and driving a valve member disposed within a valve chamber defined by the orifice member, a spring supported by the plate member and biasing the valve member toward the orifice member, a lid member sandwiching between the flange portion a diaphragm and defining a gas charge chamber, and a stopper member in contact with the diaphragm and transmitting

the displacement of the diaphragm via the shaft member to the valve member. Also, claim 1 recites that the lid member is fixed to the flange portion with the diaphragm sandwiched therebetween and the flange portion and the tube member are connected to each other with the gas charge chamber together with the diaphragm constitutes a drive mechanism of the valve member. Additionally, claim 1 recites that the guide member and the tube member are fixed to each other by a crimp formed into an exterior surface of the tube member and the at least one seal member surrounds the guide member and the tube member while being disposed on or adjacent to the crimp and in contact with the exterior surface of the tube member.

Claim 5, as amended, is directed to an expansion valve that includes a flange portion, a tube member connected to the flange portion and at least one seal member. Claim 5 recites that the tube member has fixed to its interior a guide member, an orifice member and a plate member. Further, claim 5 recites that the tube member includes a shaft member passing through the guide member and the orifice member and driving a valve member disposed within a valve chamber defined by the orifice member, a spring supported by the plate member and biasing the valve member toward the orifice member, a lid member sandwiching between the flange portion a diaphragm and defining a gas charge chamber, and a stopper member in contact with the diaphragm and transmitting the displacement of the diaphragm via the shaft member to the valve member. Claim 5 further recites that the lid member is fixed to the flange portion with the diaphragm sandwiched therebetween with the tube member being a separately formed tube member and the gas charge chamber together with the diaphragm constitutes a drive mechanism of the valve member. Also, claim 5 recites that the guide member and the tube member are fixed to each other by a crimp formed into an exterior surface of the tube member and the at least one seal member surrounds the guide member and the tube member while being disposed on or adjacent to the crimp and in contact with the exterior surface of the tube member.

It is respectfully submitted that the applied art fails to teach or suggest the features of claims 1 and 5 as amended. Specifically, it is respectfully submitted that the applied art fails to teach or suggest that the guide member and the tube member are fixed to each other by a crimp formed into an exterior surface of the tube member and the at least one seal member surrounds the guide member and the tube member while being disposed on or adjacent to the crimp and in contact with the exterior surface of the tube member. Thus, it is respectfully submitted that one of ordinary skill in the art would not be motivated to combine the features of the applied art because such combination would not result in the claimed invention. As a result, it is respectfully submitted that claims 1 and 5 are allowable over the applied art.

Claims 2-4 depend from claim 1 and include all of the features of claim 1. Claims 6-11 depend from claim 5 and include all of the features of claim 5. Thus, it is respectfully submitted that the dependent claims are allowable at least for the reasons the independent claims are allowable as well as for the features they recite.

Withdrawal of the rejection is respectfully requested.

In view of the foregoing, reconsideration of the application and allowance of the pending claims are respectfully requested. Should the Examiner believe anything further is desirable in order to place the application in even better condition for allowance, the Examiner is invited to contact Applicants' representative at the telephone number listed below.

Should additional fees be necessary in connection with the filing of this paper or if a Petition for Extension of Time is required for timely acceptance of the same, the Commissioner is hereby authorized to charge Deposit Account No. 18-0013 for any such fees and Applicant(s) hereby petition for such extension of time.

Respectfully submitted,

Date: October 19, 2004 By: _____

David T. Nikaido
Reg. No. 22,663

Carl Schaukowitch
Reg. No. 29,211

RADER, FISHMAN & GRAUER PLLC
1233 20th Street, N.W. Suite 501
Washington, D.C. 20036
Tel: (202) 955-3750
Fax: (202) 955-3751
Customer No. 23353

Enclosure(s): Amendment Transmittal

DC171113.DOC